JUN 6 2001

Engineering and Construction Division (CENWP-EC-DC) (200-la)

Mr. Rodney Struck, Project Manager
Oregon Department of Environmental Quality, Northwest Region
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201-4987

Dear Mr. Struck:

We are writing in response to your letter dated May 9, 2001, requesting additional information regarding the US Army Corps of Engineers (USACE) former North Pacific Division Laboratory in Troutdale, Oregon (ECSI No. 1390) (Enclosure 1). You have requested information on several items of interest. Any concerns we cannot address through this response we hope to address through the upcoming field investigation. The following discussion addresses your concerns and the approach we intend to take to resolve the various questions.

Testing of Soil from the Umatilla Army Depot. We are aware of at least one instance where soils were accepted from Umatilla Army Depot (UMDA) for materials testing for engineering properties. In 1994, samples were collected from the subsurface in two potential borrow areas at UMDA that were being evaluated for use as fill in construction of the chemical demilitarization facility. USACE personnel collected 22 samples filling 30 five-gallon plastic buckets on December 28, 1994, and shipped by UMDA to the Division Materials Laboratory in Troutdale. A general map of UMDA and a detail map of the sample locations is provided (Enclosure 2). The soil samples were collected near Site 51, "Northern Large Open Storage Area" north of the Explosive Washout Area. The location of the last two test pits is not available. No hazards were expected from the soils because they were subsurface soils from areas where no activity related to chemical or explosive agents had occurred. The sample transmittal log is included as (Enclosure 3). Samples were tested for gradation and moisture content between January 24-31, 1995, at the Division Laboratory. According to a memorandum prepared by USACE, Seattle District, Industrial Hygienist (Enclosure 4) dated July 5, 1995, at least one laboratory employee experienced an apparent allergic reaction to the soils. The Occupational Safety and Health Administration (OSHA) was notified and USACE and OSHA conducted independent concurrent investigations. The results of both investigations with chemical analysis results are in (Enclosure 4). Split soil samples were collected by OSHA and USACE for chemical analysis. The USACE samples were analyzed for explosives (EPA Method SW-846 9330). Results showed no detections. The OSHA analysis showed trace amounts of siloxanes and phthalate ester, but no quantifiable detections. No analyses for chemical nerve agents were conducted as there was no cause to suspect such an exposure was possible, or had occurred.

After 1994, laboratory procedures for disposal of soils that were not regulated prescribed placing soils in a pile and eventually into a "drop box" for disposal off-site as inert fill. However, because of the reported personnel exposure issue, the UMDA soil samples were retained in their original sample containers and kept on-site in case they were needed at a later date. The laboratory closed in 1997 without disposing of the soils. The UMDA soils were stored in the warehouse and are currently in the original five-gallon buckets with unbroken custody seals and stored within the former oil storage building at the laboratory. Under the current site inspection contract, we are planning to collect one project and split sample the materials. The samples will be analyzed for EPA CLP-list SVOCs, pesticide/PCBs, total trace elements, plus cyanide, and explosives using SW 846 methods 8260, 8270, 8081/8082, 6000/7000, 9014, and 8330. In addition, these soil samples will be analyzed for chemical agents, including mustard, VX, and GB (sarin) using Army-approved analytical methods.

Generally, records of materials tests and work order logbooks were not kept after the laboratory closure. Laboratory personnel recall approximately one or two other work orders for materials tests of UMDA materials between 1978 and 1997. Records exist for one work order for chemical analyses of soils conducted by the lab in 1996 for a remedial project at the deactivation furnace (Site 1), not to be confused with the chemical demilitarization facility. Analyses were for lead in soils.

"Alleged Disposal Well" We have no record or know of no former laboratory employees who disposed of wastes in locations other than described in our previous reports. The dry well was the designated location for wastes that could not be disposed in the building drains. The structure you describe in your letter is the clean out for the building drain header and would not be a logical location for waste disposal. The building drains were constructed when USACE remodeled the building and were separate from the sanitary sewer system. The clean out serves a 6-inch diameter cast iron common drain header that connects to all sink and floor drains except the rest rooms. If materials were disposed in the clean out, they would drain into the sump and be pumped into the ditch, areas we are currently evaluating, or have evaluated. In order to determine if the building drain header leaked, we are planning to include three subsurface soil samples along the header below the elevation of the pipe. Soil samples will be analyzed for EPA CLP-list VOCs, SVOCs, pesticide/PCBs, and trace elements, plus uranium and strontium, and cyanide, using SW 846 methods 8260, 8270, 8081/8082, 6000/7000, and 9014. All drawings relative to the plumbing system are included in (Enclosure 5).

The cesspool or septic tank and drainfield were constructed prior to USACE occupancy of the building. Both are referenced on drawing NP-2-3/1 (Enclosure 5). No other drawings are available. In addition to current Corps employees, we have contacted Orville Borge, former Lab Director, Larry Larson, former Soils Technician, and Joan van den Akker, former Chief Chemist. They have no recollection of chemical waste disposal at a facility such as you describe. The contractor for the new Troutdale Wastewater Treatment Plant, currently under construction across the street from the lab, encountered and removed what appears to be the former sewage

tank on September 12, 2000. Construction records for the plant show a concrete vault with no outlet beneath Graham Road at the entrance to the new plant. Three separate new sewage lines constructed there in 2000 crossed through the area and no drainfield was found, so the tank appears to have been a cesspool. The Project Engineer for the facility said no problems were encountered. Conversations related to this work are recorded in (Enclosure 6).

Groundwater Sumps. The building has no system to collect groundwater. The area has seasonally high groundwater but is protected from the 500-year flood event by the Sandy Drainage District levee system. No recorded flooding has occurred at the site. The building was modified for USACE occupancy in 1949, as shown on enclosed drawings. The general layout of the building is shown in drawings NP-2-3/2 and NP-2-3/3. Several shallow sumps are shown within the building. As shown on the plumbing drawings, all sumps drained to the larger sump at the building exterior that emptied into the ditch without treatment until 1995. This system is described and investigated in the previous investigations and will be further investigated in the Site Inspection described in our Memorandum of Understanding.

If you have any questions, please contact Michael Gross at 503-808-4913. We hope the enclosed documents and upcoming site investigation will resolve your concerns and allow for the department to make a determination of the site for our property transfer.

Sincerely,

Howard B. Jones, P.E.
Chief, Engineering and Construction Division

Enclosures

Copy Furnished:

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